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10/774,306	02/06/2004	Gjalt Gerrit De Jong	1578.603	5432
54120	7590	01/25/2008	EXAMINER	
RESEARCH IN MOTION ATTN: GLENDA WOLFE BUILDING 6, BRAZOS EAST, SUITE 100 5000 RIVERSIDE DRIVE IRVING, TX 75039			NGUYEN, BRIAN D	
			ART UNIT	PAPER NUMBER
			2616	
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			01/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/774,306

Applicant(s)

DE JONG ET AL.

Examiner

Brian D. Nguyen

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-13,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-13,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 6, 11, 13, and 16 are objected to because of the following informalities:

Claim 6, line 3, it is suggested to replace "the said device and the said network" with --said device and said network--.

Claim 11, line 2, it is suggested to replace "a said failure" with --said failure--. In lines 2, 3, and 5, it is suggested to replace "said timer process" with --said timing process--.

Claim 13, line 2, it is suggested to replace "a said failure" with --said failure--. In lines 2 and 3, it is suggested to replace "said timer process" with --said timing process--. In line 4, it is suggested to replace "the said device and the said network" with --said device and said network--.

Claim 16, line 2, it is suggested to replace "a said failure" with --said failure--. In lines 2 and 3, it is suggested to replace "said timer process" with --said timing process--.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 15 and 16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The limitation: "enabling said RRC to act consistently with a successfully sent failure response message" is not described

in the specification. The original claims 7 and 14 and paragraphs 0050 and 0051 do not describe this limitation in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "the network device" in line 3 and "said user device" in line

4. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the network device" in line 3 and "said user device" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5 and 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Yi et al (2003/0007459).

Regarding claim 1, Yi discloses a method of operating a device in a mobile communications network (par. 0003, lines 1-3, method for re-transmitting data or control

information in the radio link control layer of an IMT-2000 radio communication system), the device operating using a protocol (par. 0015 protocol data unit) having a physical layer (fig. 1, Transport Channel PHY; par. 0011, line 5, Physical Layer), a user layer (par. 0011, line 5, user plane) and at least an RRC (radio resource control) layer (fig. 1, RRC (third layer)) and an RLC (radio link control) layer (fig. 1, RLC (second layer)) of a UMTS system (par. 0006, lines 7-10, UMTS), wherein the RRC layer is arranged to submit (fig. 1, connection between RRC and RLC) an SDU (fig. 2, RLC SDU; par. 0019, lines 1-4, RLC SDU comes from the upper layer) to the RLC layer (par. 0019, lines 1-5, RLC layer performs segmentation and concatenation of the RLC SDU) for communication (par. 001.5, transmitted to the MAC layer) using the physical layer (fig. 1, connections among RRC layer, RLC layer and Transport Channel PHY), wherein said SDU comprises information (par. 0005, lines 15-18, multimedia services, such as voice, video, and data) indicative of a process (par. 0005, lines 15-18, multimedia services, such as voice, video, and data), the method comprising in response to a signal (par. 0024, RLC layer receives the state information with which success of transmission can be judged; par. 0058, line 4, sender reports the status) from said RLC layer (par. 0024, RLC layer receives the state information with which success of transmission can be judged), said signal being indicative of discard (par. 0024, RLC layer receives the state information with which success of transmission can be judged) of said SDU, causing said RRC layer to resubmit (par. 0085, lines 10-11, the information is re-transmitted) said SDU to said lower layer a predetermined number N (par. 0085, lines 12-15, when the state variable becomes same as or larger than the critical value, the retransmission process is terminated; fig. 7, process steps 71, 72, 73, 74, 75) of times; and in response to N further signals (fig. 7, process steps 71, 72, 73, 74, 75) indicative (fig. 7,

transmission success question step 73) of said discard, causing said RRC layer to submit (par. 0082, lines 11-13, the sender sends a reset instruction for instructing reset of the radio link control layer to the receiver) to said RLC layer (par. 0093, lines 13-14, error processing process, such as reset of the RLC layer) a failure response message (par. 0093, line 13, error processing process) indicative that said process indicated by the information of the SDU has failed (par. 0093, lines 12-14, the value of VT (MRW) becomes the same as or larger than the critical value).

Regarding claim 2, Yi further comprising setting an operating mode (par. 0024, lines 1-2, acknowledged mode) wherein an acknowledgement (par. 0027, line 6, positive acknowledgement) of successful reception (par. 0027, line 5, received RLC PDU) of said SDU is awaited (par. 0024, lines 1-2, acknowledged mode).

Regarding claim 3, Yi discloses wherein $N=0$ (par. 0023, lines 1-3, unacknowledged mode, wherein re-transmission is not supported). The examiner notes that having no re-transmission is equivalent to re-transmitting zero times.

Regarding claim 4, Yi discloses wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU), said method further comprises causing said RRC layer to resubmit (par. 0041, lines 8-9, an identical RESET PDU is retransmitted) said SDU to said RLC layer a predetermined number of times (par. 0042, lines 1-2, VT (RST) represents the number that the RST instruction is sent); and in response to N further signals (par. 0042, lines 1-2, VT (RST) represents the number that the RST instruction is sent) indicative of said discard (par. 0042, lines 1-3, VT (RST) represents the number that the RST instruction is sent and the value is increased by one whenever the sender sends the RESET PDU), submitting (par. 0042, lines 5-6, notifies such condition to the

upper layer) by said RRC layer to said RLC layer of a CELL UPDATE (par. 0042, line 5, further restoration is impossible) indicative of an unrecoverable error (par. 0042, line 5, further restoration is impossible) in said RLC layer for emission in response thereto.

Regarding claim 5, Yi discloses wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU), said method further comprises submitting (par. 0041, lines 1-4, reset instruction is performed by sending the RESET PDU to the receiver) by said RRC layer to said RLC layer of a CELL UPDATE message (par. 0041, line 2, RESET PDU) arranged to cause the network control device to emit for said user device a CELL UPDATE CONFIRM message (par. 0041, line 2, RESET PDU) arranged to cause said user device to reconfigure to a determined state (par. 0039, lines 4-5, resets the operation of the RLC layer; fig. 5, process steps 51-55).

Regarding claim 8, Yi discloses a method of operating a device in a mobile communications network (par. 0003, lines 1-3, method for re-transmitting data or control information in the radio link control layer of an IMT-2000 radio communication system), the device operating using a protocol (par. 0015 protocol data unit) having a physical layer (fig. 1, Transport Channel PHY; par. 0011, line 5, Physical Layer), a user layer (par. 0011, line 5, user plane) and at least an RRC (radio resource control) layer (fig. 1, RRC (third layer)) and an RLC (radio link control) layer (fig. 1, RLC (second layer)) of a UMTS system (par. 0006, lines 7-10, UMTS), wherein the RRC layer is arranged to submit (fig. 1, connection between RRC and RLC) an SDU (fig. 2, RLC SDU; par. 0019, lines 1-4, RLC SDU comes from the upper layer) to the RLC layer (par. 0019, lines 1-5, RLC layer performs segmentation and concatenation of the RLC SDU) for communication (par. 0015, transmitted to the MAC layer) using the physical

layer (fig. 1, connections among RRC layer, RLC layer and Transport Channel PHY), wherein said SDU comprises information (par. 0005, lines 15-18, multimedia services, such as voice, video, and data) indicative of a process (par. 0005, lines 15-18, multimedia services, such as voice, video, and data), the method comprising in response to a submission of an SDU (par. 0019, lines 1-2, RLC SDU which comes from the upper layer; fig. 1, RRC is upper layer) by said RRC layer to said RLC layer (fig. 1, lines connecting RRC and RLC), starting a timing process (par. 0038, lines 3-4, sender drives Timer_MRW) in the RRC layer (par. 0017, lines 3-7, RRC functions); in response (par. 0038, information is re-transmitted) to an indication that the timing process has reached a predetermined timeout (par. 0038, line 7 timer is expired), causing said RRC layer to resubmit (par. 0038, line 8, information is re-transmitted) said SDU to said RLC layer a predetermined number N of times (par. 0039, MaxMRW), on each occasion starting said timing process (fig. 5, process step 54, checking Timer_MRW); and in response to N further timeout signals (par. 0039, MaxMRW), causing said RRC layer to submit to said RLC layer a failure response message (par. 0041, line 2, RESET PDU) indicative that said process indicated by the information of the SDU has failed (par. 0039, MRW instruction can no longer be performed and resets the operation of the RLC layer).

Regarding claim 9, Yi discloses the method further comprising setting an operating mode (par. 0024, lines 1-2, acknowledged mode) wherein an acknowledgement (par. 0027, line 6, positive acknowledgement) of successful reception (par. 0027, line 5, received RLC PDU) of said SDU is awaited (par. 0024, lines 1-2, acknowledged mode).\

Regarding claim 10, Yi discloses wherein $N=0$ (par. 0023, lines 1-3, unacknowledged mode, wherein re-transmission is not supported). The examiner notes that having no re-transmission is equivalent to re-transmitting zero times.

Regarding claim 11, Yi discloses wherein in response (par. 0041, line 1, reset instruction is performed) to said RRC layer submitting to said RLC layer a said failure response message, said timer process is started (fig. 6, process step 64, TimerRST) and in response to timeout of said timer process (fig. 6, process step 64, checking Timer_RST), said method further comprises causing said RRC layer to resubmit (fig. 6, process step 62, transmitting RESET PDU) said SDU to said RLC layer a predetermined number N of times (fig. 6, process step 63, MaxRST), on each occasion restarting said timer process (fig. 6, loop comprising process steps 61-65); and in response to N further timeout signals (par. 0042, MaxRST), submitting by said RRC layer to said RLC layer of a CELL UPDATE (par. 0042, line 5, further restoration is impossible) indicative of an unrecoverable error (par. 0042, line 5, further restoration is impossible) in said RLC layer for emission in response thereto.

Regarding claim 12, Yi discloses wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU), said method further comprises submitting (par. 0041, lines 1-4, reset instruction is performed by sending the RESET PDU to the receiver) by said RRC layer to said RLC layer of a CELL UPDATE (par. 0041, line 2, RESET PDU) arranged to cause the network control device to emit for said user device a CELL UPDATE CONFIRM (par. 0041, line 2, RESET PDU) message arranged to cause said user device to reconfigure to a determined state (par. 0039, lines 4-5, resets the operation of the RLC layer; fig. 5, process steps 51-55).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yi in view of Brame et al (5,253,253).

Regarding claim 6, wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU).

Regarding claim 13, wherein in response to said RRC layer submitting to said RLC layer a said failure response message (par. 0041, line 2, RESET PDU), said timer process is started (fig. 6, process step 64, Timer_RST).

Yi et al does not disclose the following features:

Regarding claim 6, said method further comprises releasing connection between peer layers at the said device and the said network and entering an idle mode.

Regarding claim 13, said method further comprises releasing connection between peer layers at the said device and the said network and entering an idle mode.

Brame et al discloses a message bus slot update/idle control in RF trunking multisite switch, comprising the following features:

Regarding claim 6, said method further comprises releasing connection (col. 5, line 8, connections are terminated) between peer layers (fig. 4, call to console) at the said device and the said network and entering an idle mode (col. 5, line 7, slot idle messages).

Regarding claim 13, and in response to timeout (fig. 6, process step 63, MaxRST) of said timer process said method further comprises releasing connection (col. 5, line 8, connections are terminated) between peer layers (fig. 4, call to console) at the said device and the said network and entering an idle mode (col. 5, line 7, slot idle messages).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Yi et al by using the features, as taught by Brame et al, in order to allow a caller in one site area to communicate with a callee in another area (Brame et al, col. 2, lines 16-19).

10. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yi in view of Odenwalder et al (2002/0159410).

Yi et al further discloses the following features:

Regarding claim 15, wherein if said RLC layer discards (par. 0041, lines 6-9, RESET ACK PDU not received) said failure response message (par. 0041, line 5, RESET PDU).

Regarding claim 16, wherein in response to said RRC layer submitting to said RLC layer a said failure response message (par. 0041, line 2, RESET PDU), said timer process is started (fig. 6, process step 64, TimerRST).

Yi et al does not disclose the following features:

Regarding claim 15, enabling said RRC to act consistently with a successfully sent failure response message.

Regarding claim 16, enabling said RRC to act consistently with a successfully sent failure response message.

Odenwalder et al discloses rescheduling scheduled transmissions, comprising the following features:

Regarding claim 15, enabling said RRC to act consistently with a successfully sent failure response message (par. 0058, lines 14-16, the base station ignores the ACK signal and continues with the scheduled retransmissions).

Regarding claim 16, enabling said RRC to act consistently with a successfully sent failure response message (par. 0058, lines 14-16, the base station ignores the ACK signal and continues with the scheduled retransmissions).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Yi et al by using the features, as taught by Odenwalder et al, in order to provide enhancement of a transmission schedule (Odenwalder et al, par. 0009, lines 1-2).

Response to Arguments

11. Applicant's arguments filed 11/5/07 and 11/7/07 have been fully considered but they are not persuasive.

The applicant argued that:

Yi fails to teach, or even suggest a distinguishing feature recited in independent Claim 1, namely:

"in response to a signal from said RLC layer, said signal being indicative of discard of said SDU, causing said RRC layer to resubmit said SDU to said RLC layer a predetermined number N of times"

Similarly, in independent Claim 8, Yi fails to teach or suggest:

"in response to an indication that the timing process has reached a predetermined timeout, causing said RRC layer to resubmit said SDU to said RLC layer a predetermined number N of times, on each occasion starting said timing process"

In paragraph [0085] of *Yi*, *Yi* teaches the retransmission of information by TLC. However, in clear contrast to Applicants' invention, *Yi* fails to teach or even suggest an RRC layer resubmitting an SDU to the RLC layer. Accordingly, *Yi* fails to teach or suggest the above-identified feature of Applicants' invention as recited in independent Claims 1 and 8.

Yi also fails to teach, or even suggest, a further distinguishing feature recited in independent Claim 1, whereby:

"in response to N further signals indicative of said discard, causing said RRC layer to submit to said RLC layer a failure response message indicative that said process indicated by the information of the SDU has failed"

Similarly, in independent Claim 8, *Yi* fails to teach or suggest:

"in response to N further timeout signals, causing said RRC layer to submit to said RLC layer a failure response message indicative that said process indicated by the information of the SDU has failed"

These arguments are not persuasive because "N" is not defined in claims 1 and 8.

Assuming $N=0$, the RRC layer resubmit the SDU to the RLC layer zero times. In other words, there is no resubmit of SDU to the RLC layer and there is zero further signals indicative of the discard. For these reasons, the reference meets the claimed limitations at least in the case when $N=0$.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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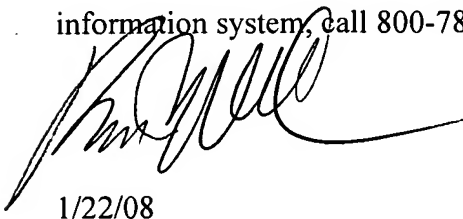
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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



1/22/08

BRIAN NGUYEN
PRIMARY EXAMINER